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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,876	09/16/2005	Kevin R. Easton	ILSC-24B	5889

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EXAMINER	
FERGUSON, MICHAEL P	
ART UNIT	PAPER NUMBER
3679	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/549,876	EASTON, KEVIN R.	
	Examiner	Art Unit	
	MICHAEL P. FERGUSON	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *6-11 and 14-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,12,13 and 17-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species 1, Figures 1-5, claims 1-5, 12, 13 and 17-20, in the reply filed on December 21, 2007 is acknowledged.

2. Claims 6-11 and 14-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 21, 2007.

Claim Objections

3. Claims 3, 4 and 12 are objected to because of the following informalities:

Claim 3 (line 9) recites "clamp operator". It should recite --clamp--.

Claim 4 (lines 2-3) recites "clamp operator from clamped to unclamped". It should recite --clamp from the clamped orientation to the unclamped orientation--.

Claim 12 (line 21) recites "clamp operator". It should recite --clamp--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

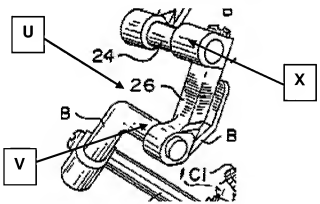
5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by McFadden (US 5,560,728).

As to claim 1, McFadden discloses a swivel adapter **25,28,26** operable by a user comprising:

a base **25,28** having a first side facing in an outward direction **U** away from the swivel adapter and a pivot surface **V** extending from the first side in the outward direction (Figure 1 reprinted below with annotations);

a center adapter **26** mounted for pivoting motion on the pivot surface and having a first device connector **X** facing in the outward direction (the longitudinal axis of recess **34** of first device connector **X** faces in direction **U**; Figure 1);

a clamp **B2** having a clamp operator **L** operable to clamp the center adapter on the pivot surface at a desired orientation with respect to the base, and unclamp the center adapter from the pivot surface, thereby allowing the center adapter to rotate with respect to the pivot surface (Figures 1 and 3).



As to claim 2, McFadden discloses a swivel adapter wherein the pivot surface **V** is on a cylindrical boss **28** and the center adapter has a split bore **36,46** mountable over the cylindrical boss (Figure 3).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 3-5, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McFadden in view of Riach (US 5,177,823).

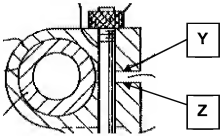
As to claims 3 and 5, McFadden discloses a swivel adapter wherein the clamp **B2** comprises:

a handle **L** pivotally connected to the center adapter **26** on one side of the split bore **36,46**;

a rocker **38** pivotally connected to the center adapter on an opposite side of the split bore (rocker **38** is pivotally rotated on the threaded end of rod **42**; Figure 3);

a rod **42** pivotally connected to the handle, the rocker and the rod operatively connected so as to span the split bore and also to define oppositely directed first and second shoulders **Y,Z** (Figure 3 reprinted below with annotations).

McFadden fails to disclose a swivel adapter wherein the clamp comprises biasing means disposed between the first shoulder and the second shoulder for facilitating movement of the clamp fro ma clamped orientation to an unclamped orientation.



Riach teaches a clamp **15** comprising a handle **23** pivotally connected to the clamp on one side; a rocker comprising a nut on an opposite side of the clamp; a rod **24** pivotally connected to the handle; and biasing means comprising Belville springs **21,22** disposed between a first and second shoulders of the clamp for facilitating movement or the clamp form a clamped orientation to an unclamped orientation; springs **21,22** constantly resiliently bias clamp elements **12,13** away from one another so that, when rod **24** is in an unclamped position, the clamping force between the clamp elements is automatically released (Figures 5 and 6, column 8 lines 14-22). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the swivel adapter disclosed by McFadden with biasing springs as taught by Riach in order to resiliently bias the first and second shoulders away from one another so that, when the rod is in an unclamped position, the clamping force between the split bore and the cylindrical boss is automatically released.

As to claim 4, McFadden discloses a swivel adapter wherein the rocker comprises means for variably adjusting the force needed to move the clamp from the clamped orientation to the unclamped orientation (rocker **38** is pivotally rotated on the threaded end of rod **42** to adjust the clamping force; Figure 3).

As to claims 12 and 13, McFadden discloses a swivel adapter **25,28,26** connectable to, and extending outward from, a head support **11** comprising:

a base **25,28** comprising:

a first side facing in an outward direction **U** away from the swivel adapter, and

a pivot surface **V** extending from the first side in the outward direction;

a center adapter **26** comprising:

a split bore **36,46** mountable for pivoting motion on the pivot surface, and

a device connector **X** facing in the outward direction (the longitudinal axis of recess **34** of first device connector **X** faces in direction **U**; Figure 1);

a clamp **B2** comprising:

a handle **L** pivotally connected to the center adapter on one side of the split bore,

a rocker **38** pivotally connected to the center adapter on an opposite side of the split bore (rocker **38** is pivotally rotated on the threaded end of rod **42**; Figure 3), and

a rod **42** pivotally connected to the handle, the rocker and rod operatively connected so as to span the split bore an also to define oppositely directed first and second shoulders **Y,Z**; and

the handle being operable to clamp the center adapter on the pivot surface at a desired orientation with respect to the base, and unclamp the center adapter from the pivot surface, thereby allowing the center adapter to rotate with respect to the pivot surface (Figures 1 and 3).

McFadden fails to disclose a swivel adapter wherein the clamp comprises biasing means disposed between the first shoulder and the second shoulder for facilitating

movement of the clamp fro ma clamped orientation to an unclamped orientation, wherein the biasing means is a plurality of Belville springs.

Riach teaches a clamp **15** comprising a handle **23** pivotally connected to the clamp on one side; a rocker comprising a nut on an opposite side of the clamp; a rod **24** pivotally connected to the handle; and biasing means comprising Belville springs **21,22** disposed between a first and second shoulders of the clamp for facilitating movement or the clamp form a clamped orientation to an unclamped orientation; springs **21,22** constantly resiliently bias clamp elements **12,13** away from one another so that, when rod **24** is in an unclamped position, the clamping force between the clamp elements is automatically released (Figures 5 and 6, column 8 lines 14-22). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the swivel adapter disclosed by McFadden with biasing springs as taught by Riach in order to resiliently bias the first and second shoulders away from one another so that, when the rod is in an unclamped position, the clamping force between the split bore and the cylindrical boss is automatically released.

8. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McFadden in view of Ross (US 2,320,303).

As to claims 17 and 18, McFadden discloses a base unit handle **12** connectable to a shaft **24** and a bar **10** comprising:

a body **12** having first and second split bores **36,46,34,44** adapted to receive the shaft and the bar, respectively;

a clamping mechanism **B1** connected to the body and being operable to clamp and unclamp the first and second split bores on the respective shaft and bar, the clamping mechanism comprising:

a rod **42** having one end connected to the body, and

a closing handle **L** (Figures 1 and 3).

McFadden fails to disclose a base unit handle wherein the clamping mechanism comprises a linkage connected between one end of the rod and one end of the closing handle and providing a mechanical advantage in transferring a force being applied from the closing handle to the rod; the linkage comprising a transfer link having one end pivotally connected to the closing handle; a cam link having one end pivotally connected to an opposite end of the transfer link; and an opposite end pivotally connected to the rod.

Ross teaches a clamping mechanism comprising a linkage connected between one end **37** of a rod **38** and one end of a closing handle **10** and providing a mechanical advantage in transferring a clamping force being applied from the closing handle to the rod; the linkage comprising a transfer link **27** having one end pivotally connected to the closing handle; a cam link **33** having one end pivotally connected to an opposite end of the transfer link; and an opposite end pivotally connected to the rod; transfer link **27** and cam link **33** provide a compounded lever system enabling one to exert an extremely powerful clamping force with slight manual effort (Figure 3, column 2 line 22-column 3 line 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the base unit handle disclosed by

McFadden with a linkage comprising a transfer link and a cam link as taught by Ross in order to provide a compounded lever system enabling one to exert a more powerful clamping force with slight manual effort.

As to claim 19, McFadden discloses an apparatus connectable to a surgical table **14** comprising:

a generally U-shaped frame **10,16,18** having a crossbar **10** and adapted to be connected to the surgical table;

a transitional arm **24** having a shaft on one end;

a base unit handle **12** comprising:

a body having a first split bore **34,44** connectable to the crossbar and

a second split bore **36,46** connectable to the shaft on the transition arm;

a clamping mechanism **B1** connected to the body and being operable to apply a clamping force simultaneously to the first split bore and the second split bore, the clamping mechanism comprising:

a cam rod **42** having one end connected to the body, and

a closing handle **L** (Figures 1 and 3).

McFadden fails to disclose an apparatus wherein the clamping mechanism comprises a linkage connected between one end of the cam rod and one end of the closing handle and providing a mechanical advantage in transferring a force being applied from the closing handle to the cam rod, thereby providing a greater clamping force with the closing handle than would be produced without the linkage.

Ross teaches a clamping mechanism comprising a linkage **27,33** connected between one end **37** of a cam rod **38** and one end of a closing handle **10** and providing a mechanical advantage in transferring a clamping force being applied from the closing handle to the rod; thereby providing a greater clamping force with the closing handle than would be produced without the linkage; linkage **27,33** provides a compounded lever system enabling one to exert an extremely powerful clamping force with slight manual effort (Figure 3, column 2 line 22-column 3 line 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus disclosed by McFadden with a linkage as taught by Ross in order to provide a compounded lever system enabling one to exert a more powerful clamping force with slight manual effort.

As to claim 20, McFadden discloses an apparatus for supporting a head support **11** at one end of a table **14** comprising:

a swivel adapter **25,28,26** operable by a user comprising:

a base **25,28** having a first side facing in an outward direction **U** away from the swivel adapter, and

a pivot surface **V** extending from the first side in the outward direction;

a device connector **B3** adapted to be connected to the head support,

a center adapter **26** mounted for pivoting motion on the pivot surface and having a first device connector **X** facing in the outward direction (the longitudinal axis of recess **34** of first device connector **X** faces in direction **U**; Figure 1),

a clamp **B2** having a clamp operator **L** operable to clamp the center adapter on the pivot surface at a desired orientation with respect to the base, and unclamp the center adapter from the pivot surface, and

a sleeve adapter **26a** connected to a lower end of the base (sleeve adapter **26a** is connected to base **25,28** via center adapter **26** and pivot surface **V**; Figure 1);

a transitional arm **24** having an upper end connectable to the sleeve adapter and having a shaft on a lower end (an upper end and a lower end having a shaft of translational arm **24** are constituted by first and second angled arms of right-angle arm **24**; not shown, column 2 line 65-column 3 line 1);

a generally U-shaped frame **10,16,18** having a crossbar **10** and adapted to be connected to the table; and

a base unit handle **12** comprising:

a body **12** having a first split bore **36,46** connectable to the shaft of the transitional arm and a second split bore **34,44** connectable to the crossbar,

a clamping mechanism **B1** connected to the body and being operable to clamp and unclamp the first split bore and the second split bore on the shaft and crossbar, respectively, the clamping mechanism comprising:

a rod **42** having one end connected to the body, and

a closing handle **L** (Figures 1 and 3).

McFadden fails to disclose an apparatus wherein the clamping mechanism comprises a linkage connected between one end of the rod and one end of the closing

handle and providing a mechanical advantage in transferring a force being applied from the closing handle to the rod.

Ross teaches a clamping mechanism comprising a linkage **27,33** connected between one end **37** of a rod **38** and one end of a closing handle **10** and providing a mechanical advantage in transferring a clamping force being applied from the closing handle to the rod; linkage **27,33** provides a compounded lever system enabling one to exert an extremely powerful clamping force with slight manual effort (Figure 3, column 2 line 22-column 3 line 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus disclosed by McFadden with a linkage as taught by Ross in order to provide a compounded lever system enabling one to exert a more powerful clamping force with slight manual effort.

Response to Arguments

9. Applicant's arguments filed May 12, 2008 have been fully considered but they are not persuasive.

As to claim 1, Attorney argues that:

McFadden does not disclose a swivel adapter comprising a center adapter having *a first device connector facing in the outward direction.*

Examiner disagrees. As to claim 1, McFadden discloses a swivel adapter comprising a center adapter **26** having a first device connector **X** facing in the outward direction **U** (the longitudinal axis of recess **34** of first device connector **X** faces in direction **U**; Figure 1).

As to claims 3 and 12, Attorney argues that:

McFadden in view of Riach does not disclose a swivel adapter wherein the rocker and the rod are operatively connected *so as to span the split bore and also to define oppositely directed first and second shoulders*.

Examiner disagrees. As to claims 3 and 12, McFadden discloses a swivel adapter wherein the rocker **38** and the rod **42** are operatively connected so as to span the split bore **36,46** and also to define oppositely directed first and second shoulders **Y,Z** of clamp **B2** (Figure 3).

In response to applicant's argument that there is no suggestion to combine the McFadden and Riach references to disclose a swivel adapter wherein the rocker and the rod are operatively connected so as to span the split bore and also to define oppositely directed first and second shoulders, Examiner notes that the Riach reference has not been relied upon to teach such structural features and that such features are disclosed by the McFadden reference.

Furthermore, in response to applicant's argument that the references fail to show first and second shoulders separate from the split bore, it is noted that such structural limitations are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As to claims 17, 19 and 20, Attorney argues that:

Ross does not teach an apparatus *wherein the clamping mechanism comprises a linkage connected between one end of the rod and one end of the closing*

handle and providing a mechanical advantage in transferring a force being applied from the closing handle to the rod.

Examiner disagrees. As to claims 17, 19 and 20, Ross teaches a clamping mechanism comprising a linkage **27,33** connected between one end **37** of a rod **38** and one end of a closing handle **10** and providing a mechanical advantage in transferring a clamping force being applied from the closing handle to the rod; linkage **27,33** provides a compounded lever system enabling one to exert an extremely powerful clamping force with slight manual effort (Figure 3, column 2 line 22-column 3 line 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus disclosed by McFadden with a linkage as taught by Ross in order to provide a compounded lever system enabling one to exert a more powerful clamping force with slight manual effort.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL P. FERGUSON whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF
08/14/08

/Michael P. Ferguson/
Primary Examiner, Art Unit 3679